Workshop 5: Google Home and ESP

1.1 Description

The Google Home as we know it is a useful device with which you can do a lot. However, additional features such as controlling lights cost a lot of money. In this workshop we describe a cheaper method to control an ESP via Google Home.

Part 1: turn on/off the lights

Part 2: Measuring temperature

1.2 Equipment

- ESP32 or ESP8266
- Google nest
- Smartphone
- Laptop
- LED
- Sensor (DHT-sensor)

1.3 Info

https://www.instructables.com/Connecting-My-ESP8266-With-Google-Home/

https://learn.adafruit.com/create-an-internet-of-things-dashboard-with-adafruit-dot-io

1.4 PART 1: turn on/off light

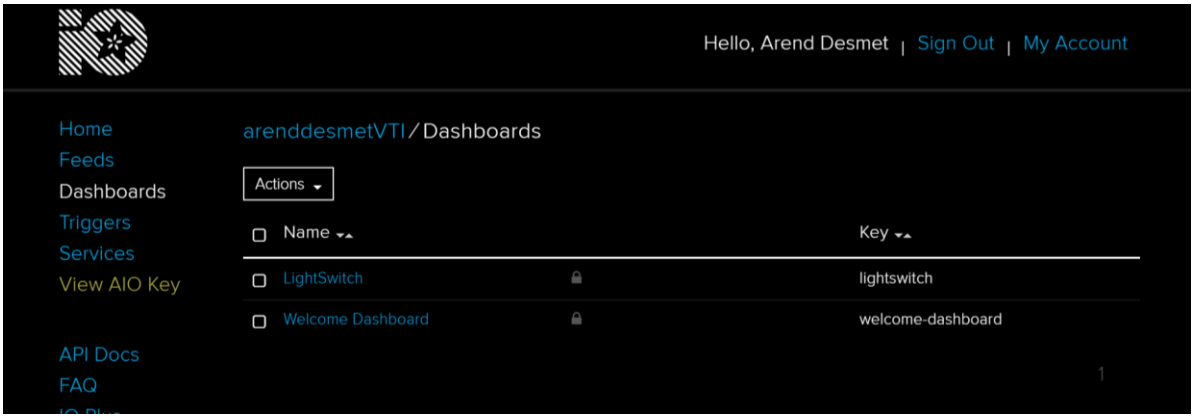
1.4.1 Set up

1.4.1.1 Necessary software

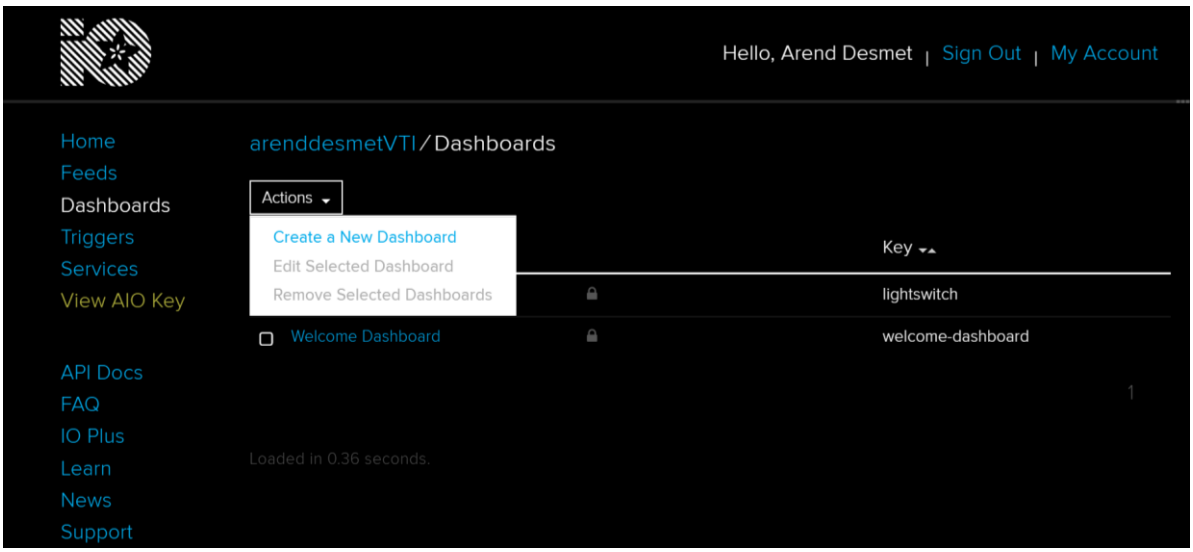
To combine Google Home and THE ESP, we use some external programs. We use IFTTT and adafruit.io to get the desired result. That's why it's important to sign up on both programs, preferably with the same email.

1.4.1.2 Set adafruit

First of all, we make sure that adafruit.io is ready for use so that we don't have to think about this later. Go to adafruit.io and log in. Normally you should see this screen now:

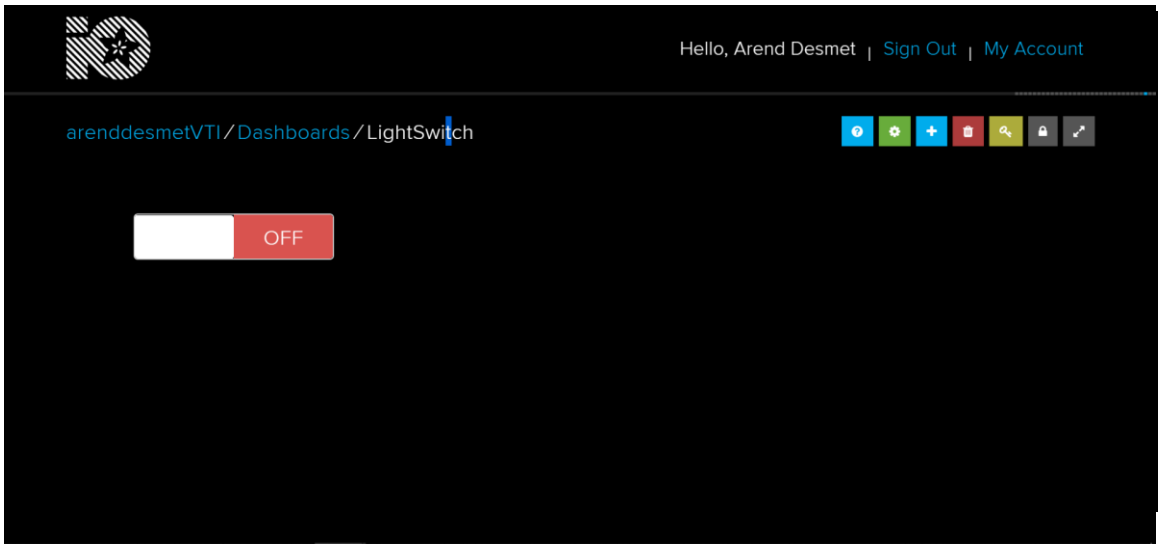


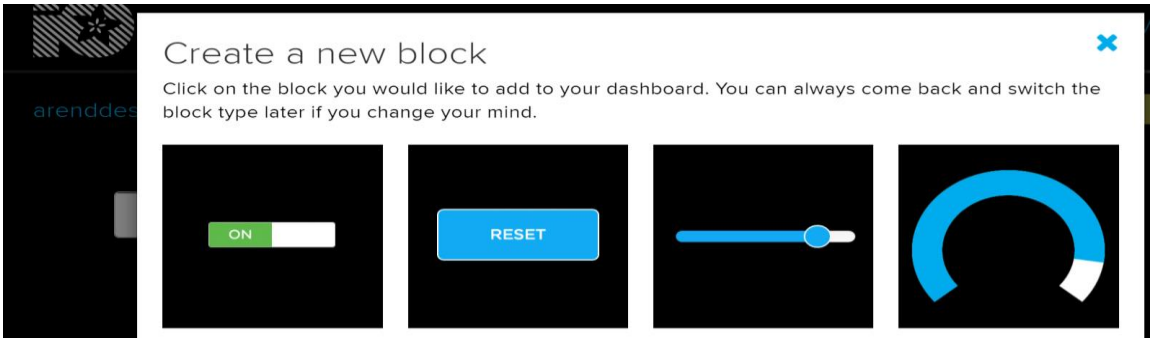
Then go to "Actions" and click "Create a new dashboard".



Then assign a name to your new dashboard. For example, call it "lightswitch." Then you end up on this screen without the push button. Then, in the upper-right corner of the + sign, click.

Then you choose the "toggle", a simple on/off switch. Now Adafruit is ready for use.





1.4.1.3 Set up IFTTT

Now that we've set up Adafruit, it's time to set up IFTTT. Go to IFTTT and log in. Normally you should get next screen:

Then, in the upper-left corner of the left, click Applet. Then you come to the next screen:

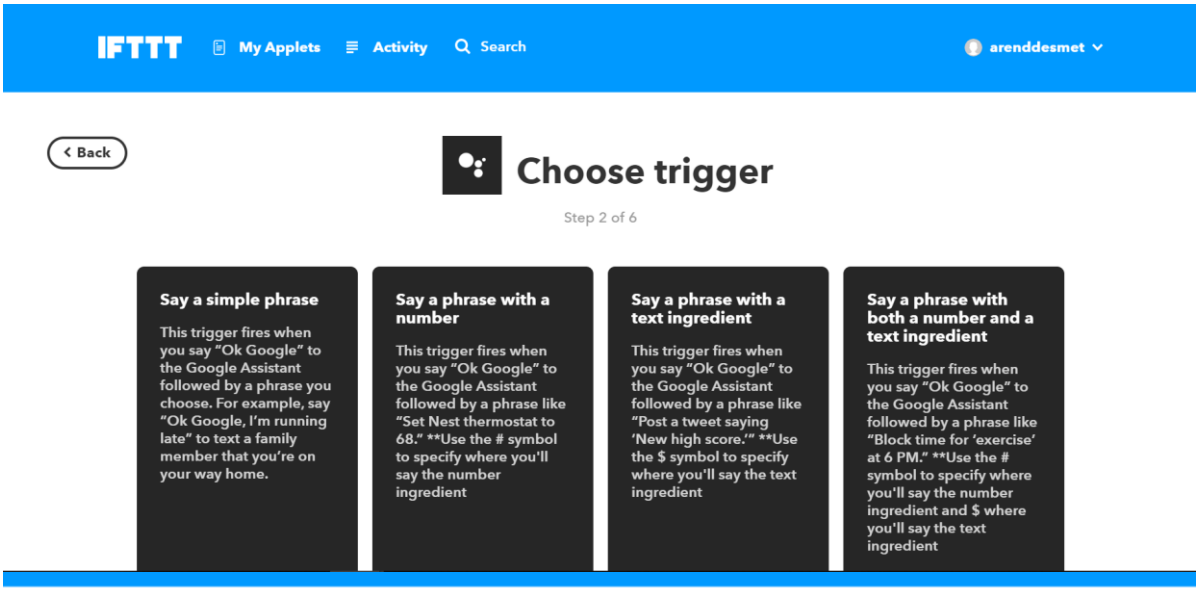
Click "New Applet".

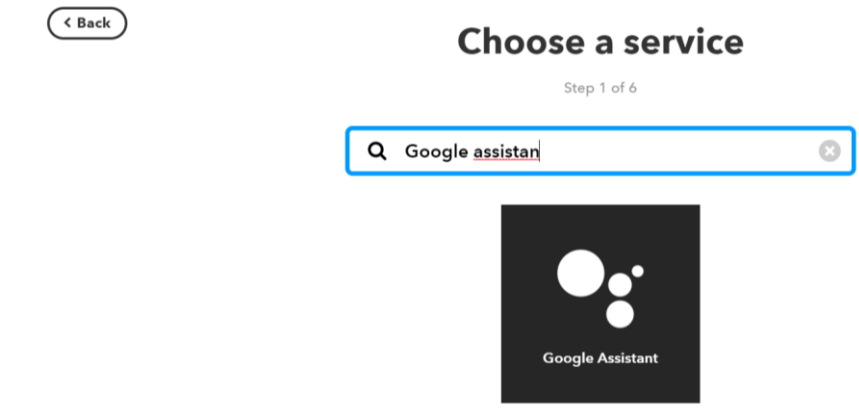

New Applet

Then you come on next screen. Then click "This"

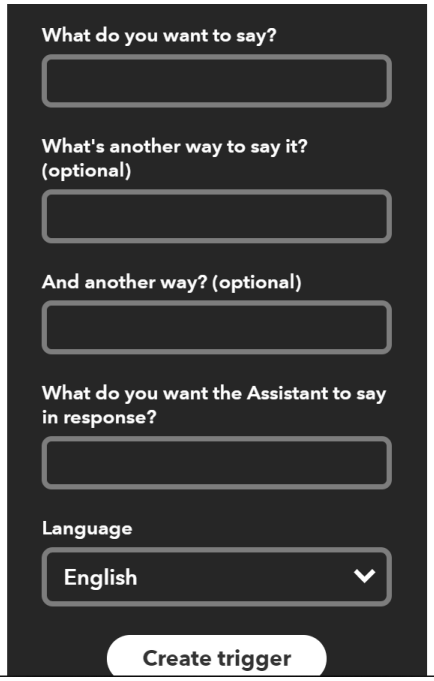
Now we're asked to choose a service, search for "Google assistant". Then press the icon.

Sign in with your Google account, and then choose "Say a simple phrase."





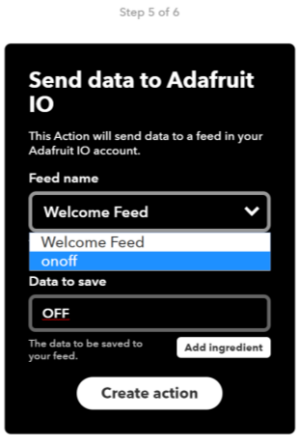
Enter in what sense you want to say to turn on the lights and how Google Home should respond to them. Then click "Create trigger"

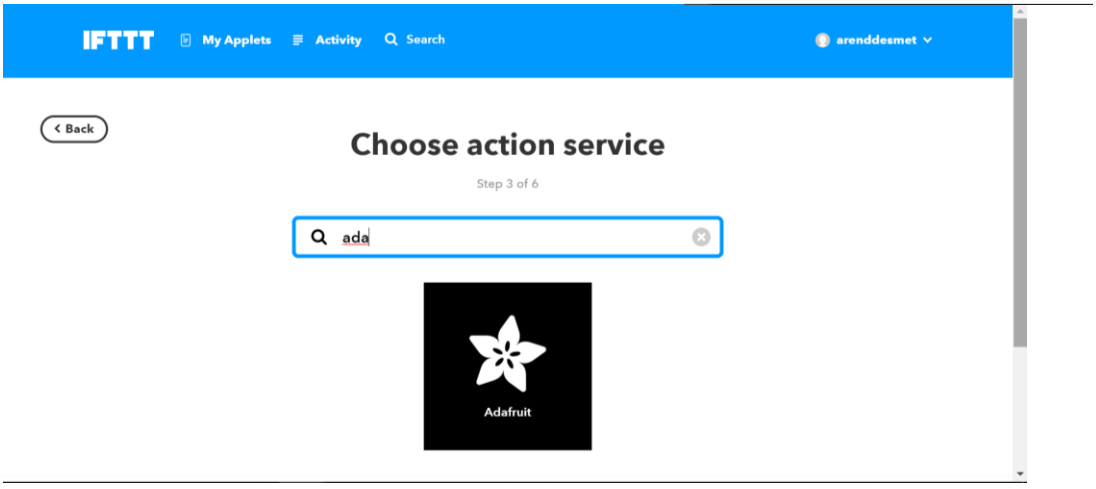


Then you come back to the screen where you can choose "this" or "that". This time, opt for "that".

Now you have to choose a service again. This time, choose Adafruit.

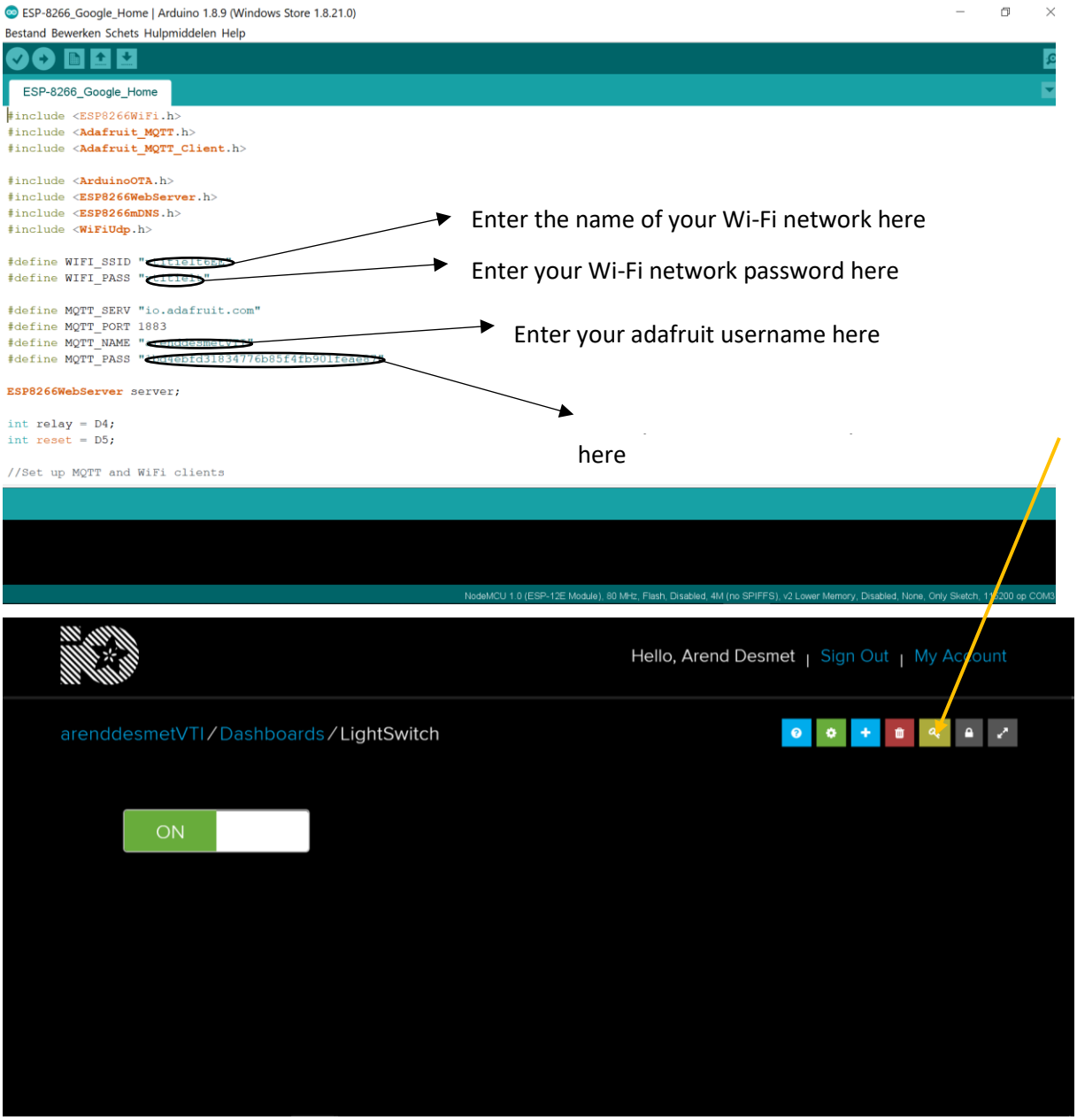
In "feed name", choose "onoff" and fill in "OFF" for "data to save". This is what we need to do to make the exit of the esp "high". To make the output "low", you need to fill in "ON" for "dates to save".





1.4.2 Program

The program sentence attached. Each line describes exactly what is happening. Some things still need to change.



This is the work order to control an ESP port using a Google Home. Connect a relay to the given pins and the possibility is there to control external devices!

1.5 Part 2: measuring

Get info from links on page 2-1